Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information					
Building number, street name			4.	Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other de	escription		•
BRAMPTON				4	
B. Individual who reviews and takes i	responsibility fo	r design activities	$\overline{}$	7	
Name MICHAEL O'ROURKE		Firm HVAC DESIGNS LTD	2.2		
Street address			Unit no.		Lot/con.
375 FINLEY AVE			202		N/A
Municipality AJAX	Postal code L1S 2E2	Province ONTARIO	E-mail info@hvacde	esigns.ca	
Telephone number (905) 619-2300	Fax number (905) 619-2375		Cell number		
C. Design activities undertaken by in	dividual identifie	ed in Section B. [Bu	ilding Code Ta	able 3.5.2.1 O	PF Division C]
☐ House	⊠ HVAC	- House		Building Str	ructural
☐ Small Buildings		gServices) 🗖	Plumbing –	House
☐ Large Buildings☐ Complex Buildings	☐ Detecti ☐ Fire Pr	on, Lighting and Po			All Buildings wage Systems
Description of designer's work	- File	Model:		On-site Sev	wage Systems
HEAT LOSS / GAIN CALCULATIONS DUCT SIZING RESIDENTIAL MECHANICAL VENTILATIO	N DESIGN SUMM	2000	OPT 2ND	IGE ESTATES	
RESIDENTIAL SYSTEM DESIGN per CSA-	F280-12	Project	L. SOMMER KID	GE ESTATES	
D. Declaration of Designer	7, 2,	3			
I MICHAEL O'ROURKE 💉	0. 6.3		declare t	that (choose on	e as appropriate):
(pr	int name)	9			
□ I review and take responsibility to Division C, of the Building Code. classes/categories.	or the design work of I am qualified, and	on behalf of a firm regis the firm is registered, i	tered under subs n the	section 3.2.4.of appropi	
Individual BCIN: Firm BCIN:	The Con				
☑ I review and take responsibility for designer" under subsection 3.2	or the design and a 2.5.of Di visio	m qualified in the appro n C, of the Building Co		as an "other	
		d qualification:	O.B.C SEI	NTENCE 3.2	2.4.1 (4)
☐ The design work is exempt Basis for exemption from registra		on and qualification req	uirements of the	Building Code.	
I certify that:					
The information contained I have submitted this applica		ule is true to the best of edge and consent of the			
April 22, 2024			Make	I Okon	Le.
Date	1			Signature	of Designer

NOTE

^{1.} For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.

^{2.} Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.



SITE NAME: BUILDER:				TATES				TYPE:	OPT 2NI)				GFA:	1061			DATE: Apr-24 LO# 104856						ANGE RATE 0.275 ANGE RATE 0.086	HEAT LOSS		CSA-F2	
ROOM USE	I		MILO	MBR			ENS		2000				BED-2		1001	BED-3		LO# 101000	1	BATH	CHILL	THATOTAL	AIR OIL	ANGENATE 0.000	TILAT CAIN	<u> </u>	I LIG OTHER	IAITOL
EXP. WALL				12			21						11			12				0								
CLG. HT.				9			9						9			9				9								
CEG. III.	FACTO	nc.		9			9						9			9				9								
000 9944 4 4054	FACTO			400			404									400				0								
GRS.WALL AREA	LOSS	GAIN		103			181						95			103				•								
GLAZING				LOSS			LOSS							GAIN	_	LOSS					GAIN							
NORTH		12.8	0	0	0	0	0	0				0	0	0	0	0	0		0	0	0							
EAST		32.9	0	0	0	0	0	0				26	540	856	35	727	1152		0	0	0							
SOUTH		19.8	0	0	0	16	332	317				0	0	0	0	0	0		0	0	0							
WEST		32.9	30	623	987	0	0	0				0	0	0	0	0	0		0	0	0							
SKYLT.	34.1	132.1	0	0	0	0	0	0				0	0	0	0	0	0		0	0	0							
DOORS		2.9	0	0	0	0	0	0				0	0	0	0	0	0		0	0	0							
NET EXPOSED WALL		0.5	73	254	38	165	571	85				69	238	35	68	236	35		0	0	0							
NET EXPOSED BSMT WALL ABOVE GR	3.5	0.5	0	0	0	0	0	0				0	0	0	0	0	0		0	0	0							
EXPOSED CLG	1.3	0.6	285	357	159	142	178	79				232	291	129	204	256	114		101	127	56							
NO ATTIC EXPOSED CLG	2.7	1.2	0	0	0	0	0	0				0	0	0	17	46	20		0	0	0							
EXPOSED FLOOR	2.5	0.4	0	0	0	4	10	1				0	0	0	0	0	0		0	0	0							
BASEMENT/CRAWL HEAT LOSS				0			0						0			0			1	0								
SLAB ON GRADE HEAT LOSS				0			0						0			0				0								
SUBTOTAL HT LOSS				1234			1091						1069			1265				127								
SUB TOTAL HT GAIN					1184			482						1020	1		1321		1		56							
LEVEL FACTOR / MULTIPLIER			0.20	0.39		0.20	0.39					0.20	0.39		0.20	0.39			0.20	0.39								
AIR CHANGE HEAT LOSS				487			431						422			499			1	50								
AIR CHANGE HEAT GAIN					95			39						82			106				5							
DUCT LOSS				0			152						0			0				0								
DUCT GAIN					0			52						0			0				0							
HEAT GAIN PEOPLE	240		2		480	0		0				1		240	1		240		0		0							
HEAT GAIN APPLIANCES/LIGHTS			-		534			ō				•		534			534		ľ		0							
TOTAL HT LOSS BTU/H				1721	•••		1674	ŭ					1490	•••		1764				176	·							
TOTAL HT GAIN x 1.3 BTU/H					2980		1014	745					1430	2439		1704	2861				79							
TOTAL III GAIRX 1.0 BTOM					2000			740						2400			2001							ll.		Į.		
ROOM USE				LV/DN					K	/B/G		El	NTRY-1	1		LAUN				FOY		ENTRY	Y-2				BAS	
EXP. WALL				11						12			7			0				12		21					56	
CLG. HT.				10						10			10			9				11		11					9	
	FACTO	RS																										
GRS.WALL AREA	LOSS									115			67			•				127		223					314	
GLAZING		GAIN		106												0						223					1000	GAIN
		GAIN		106 LOSS	GAIN						GAIN			GAIN		LOSS	GAIN			LOSS	GAIN							0
i NORTH			0	LOSS	GAIN 0						GAIN 0	0		GAIN 0	0	-	GAIN 0		0	LOSS 0		LOSS	S GAIN 0				0 0	
NORTH EAST	20.8	12.8	0 37	LOSS 0	0				L	oss	0	0	LOSS			LOSS	0		0	0	0	LOSS	S GAIN				0 0	
NORTH EAST SOUTH	20.8 20.8		0 37 0	LOSS					0 0	oss (LOSS 0	0	0 0	LOSS 0			0 5 0			LOSS	S GAIN 0				0 0	329 0
EAST SOUTH	20.8 20.8 20.8	12.8 32.9 19.8	37 0	LOSS 0 769 0	0 1218				0 0 0	OSS (0 0 0	0 0 0	0 0 0	LOSS 0 0 0	0 0 0	0	LOSS 0 0	0 0 0		5 0	0 104 0	0 165 0	0 0 0 0 0 0	S GAIN 0 0 0				0 0 10 208 0 0	329 0
EAST SOUTH WEST	20.8 20.8 20.8 20.8	12.8 32.9 19.8 32.9	37	LOSS 0 769	0 1218 0				0 0 0	OSS (0 0	0	0	LOSS 0 0	0	0	LOSS 0 0	0		5	0 104 0 0	0 165	0 0 0 0 0 0	S GAIN 0 0				0 0 10 208 0 0	329 0 329
EAST SOUTH WEST SKYLT.	20.8 20.8 20.8 20.8 34.1	12.8 32.9 19.8 32.9 132.1	37 0 0 0	0 769 0 0	0 1218 0 0				0 0 0 33	OSS (0 0 0 0 686	0 0 0 1086 0	0 0 0 0	LOSS 0 0 0 0	0 0 0 0	0 0	LOSS 0 0 0 0	0 0 0		5 0 0	0 104 0 0	0 165 0 0	LOSS 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0				0 0 10 208 0 0 10 208 0 0	329 0 329 0
EAST SOUTH WEST SKYLT. DOORS	20.8 20.8 20.8 20.8 34.1 19.6	12.8 32.9 19.8 32.9 132.1 2.9	37 0 0 0 0	0 769 0 0 0	0 1218 0 0				0 0 0 33 0	OSS (0 0 0 0 686 0	0 0 0 1086 0	0 0 0 0 0 20	LOSS 0 0 0 0 0 0 392	0 0 0 0 0 58	0 0 0 0	LOSS 0 0 0 0	0 0 0 0 0		5 0 0 0 36	0 104 0 0 0 705	0 165 0 0 0 104	LOSS 0 0 0 0 0 0 0 0 0 0 40 783	S GAIN 0 0 0 0 0 116				0 0 10 208 0 0 10 208	329 0 329 0 58
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL	20.8 20.8 20.8 20.8 34.1 19.6 3.5	12.8 32.9 19.8 32.9 132.1 2.9 0.5	37 0 0 0	LOSS 0 769 0 0 0 238	0 1218 0 0 0				0 0 0 33 0	OSS (0 0 0 0 686 0	0 0 0 1086 0 0 42	0 0 0 0 0 20 47	LOSS 0 0 0 0 0 392 164	0 0 0 0 0 58 24	0 0 0 0 0 0	LOSS 0 0 0 0 0	0 0 0 0 0		5 0 0 0 36 86	0 104 0 0 0 705 299	0 165 0 0 0 104 44	LOSS 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 0 116				0 0 10 208 0 0 10 208 0 0 20 392 0 0	329 0 329 0 58 0
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BMT WALL ABOVE GR	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5	12.8 32.9 19.8 32.9 132.1 2.9 0.5	37 0 0 0 0 0 69	LOSS 0 769 0 0 0 0 238 0	0 1218 0 0 0 0 0				0 0 0 33 0 0 82	OSS 0 0 0 0 686 0 0	0 0 0 1086 0 0 42	0 0 0 0 0 20 47	DOSS 0 0 0 0 0 392 164 0	0 0 0 0 0 58 24	0 0 0 0 0 0 0	LOSS 0 0 0 0 0 0 0	0 0 0 0 0 0		5 0 0 0 36 86 0	0 104 0 0 0 705 299 0	0 165 0 0 0 104 44	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 116 94				0 0 10 208 0 0 10 208 0 0 20 392	329 0 329 0 58 0
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE OR EXPOSED CLG	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.5	37 0 0 0 0 0 69 0	LOSS 0 769 0 0 0 0 238 0	0 1218 0 0 0 0 0 35 0				0 0 0 33 0 0 82 0	OSS 0 0 0 0 686 0 0 285 0 0	0 0 0 1086 0 0 42 0	0 0 0 0 0 20 47 0	LOSS 0 0 0 0 0 0 392 164 0	0 0 0 0 0 58 24 0	0 0 0 0 0 0	LOSS 0 0 0 0 0 0 0 0 0 0 81	0 0 0 0 0 0 0		5 0 0 0 36 86 0	0 104 0 0 0 705 299 0	0 165 0 0 0 104 44 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 0 116 94 0				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0	329 0 329 0 58 0 88
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLG	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 0 69 0	LOSS 0 769 0 0 0 238 0	0 1218 0 0 0 0 0 35				0 0 0 33 0 0 82 0 0	OSS 0 0 0 0 686 0 0 285 0 0	0 0 0 1086 0 0 42 0	0 0 0 0 0 20 47 0	LOSS 0 0 0 0 0 392 164 0 0	0 0 0 0 0 58 24 0 0	0 0 0 0 0 0 0 65	LOSS 0 0 0 0 0 0 0 0 0 0 81 0 0	0 0 0 0 0 0 0 0		5 0 0 0 36 86 0	0 104 0 0 0 705 299 0 0	0 165 0 0 0 104 44 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 0 116 94 0 0				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0	329 0 329 0 58 0 88 0
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE OR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.5	37 0 0 0 0 0 69 0	LOSS 0 769 0 0 0 0 238 0 0	0 1218 0 0 0 0 0 35 0				0 0 0 33 0 0 82 0	OSS 0 0 0 0 686 0 0 285 0 0	0 0 0 1086 0 0 42 0	0 0 0 0 0 20 47 0	LOSS 0 0 0 0 0 392 164 0 0	0 0 0 0 0 58 24 0	0 0 0 0 0 0	LOSS 0 0 0 0 0 0 0 0 0 0 81	0 0 0 0 0 0 0		5 0 0 0 36 86 0	0 104 0 0 0 705 299 0	0 165 0 0 0 104 44 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 0 116 94 0				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0 0 0	329 0 329 0 58 0 88
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE OR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 0 69 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1218 0 0 0 0 0 35 0				0 0 0 33 0 0 82 0 0	OSS 0 0 0 0 686 0 0 285 0 0	0 0 0 1086 0 0 42 0	0 0 0 0 0 20 47 0	LOSS 0 0 0 0 0 392 164 0 0 0	0 0 0 0 0 58 24 0 0	0 0 0 0 0 0 0 65	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0		5 0 0 0 36 86 0	0 104 0 0 0 705 299 0 0 0	0 165 0 0 0 104 44 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 0 116 94 0 0				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0	329 0 329 0 58 0 88 0
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE OR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 0 69 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1218 0 0 0 0 0 35 0				0 0 0 33 0 0 82 0 0	OSS 0 0 0 686 0 0 285 0 0 0 0	0 0 0 1086 0 0 42 0	0 0 0 0 0 20 47 0	LOSS 0 0 0 0 0 392 164 0 0 0	0 0 0 0 0 58 24 0 0	0 0 0 0 0 0 0 65	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0		5 0 0 0 36 86 0	0 104 0 0 0 705 299 0 0 0	0 165 0 0 0 104 44 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 116 94 0 0				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0 0 0 0 0	329 0 329 0 58 0 88 0
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT LOSS	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 0 69 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1218 0 0 0 0 35 0 0				0 0 0 33 0 0 82 0 0	OSS 0 0 0 686 0 0 285 0 0 0 0 0 0	0 0 1086 0 0 42 0 0	0 0 0 0 0 20 47 0	LOSS 0 0 0 0 0 392 164 0 0 0	0 0 0 0 0 58 24 0 0	0 0 0 0 0 0 0 65	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 36 0		5 0 0 0 36 86 0	0 104 0 0 0 705 299 0 0 0	0 165 0 0 0 104 44 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 116 94 0 0				0 0 10 208 0 0 110 208 0 0 20 392 0 0 168 590 0 0 0 0 1828	329 0 329 0 58 0 88 0 0
EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BINT WALL ABOVE OR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT GAIN	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 69 0 0 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 1007	0 1218 0 0 0 0 0 35 0				0 0 0 33 0 0 82 0 0	OSS 0 0 0 0 686 0 0 285 0 0 0 0 0 0	0 0 1086 0 0 42 0 0 0	0 0 0 0 20 47 0 0	LOSS 0 0 0 0 0 392 164 0 0 0 0 0 555	0 0 0 0 0 58 24 0 0	0 0 0 0 0 0 0 65 0	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0		5 0 0 36 86 0 0	0 104 0 0 0 705 299 0 0 0 0 0	0 165 0 0 0 104 44 0	COSS 0 0 0 0 0 0 0 0 0 0 40 783 183 633 0 0 0 0 0 0 1416	S GAIN 0 0 0 0 116 94 0 0 0 0				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0 0 0 1828	329 0 329 0 58 0 88 0
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EAST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE OR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SUBTOTAL HT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 69 0 0 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 1007	0 1218 0 0 0 0 35 0 0 0				0 0 0 33 0 0 82 0 0 0	OSS 0 0 0 0 686 0 0 285 0 0 0 0 0 0	0 0 0 1086 0 0 42 0 0 0	0 0 0 0 0 20 47 0 0 0	LOSS 0 0 0 0 0 392 164 0 0 0 0 0 555	0 0 0 0 0 58 24 0 0	0 0 0 0 0 0 0 65 0	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 36 0		5 0 0 36 86 0 0	0 104 0 0 0 705 299 0 0 0 0 0	0 165 0 0 104 44 0 0 0	COSS 0 0 0 0 0 0 0 0 0 0 40 783 183 633 0 0 0 0 0 0 1416	S GAIN 0 0 0 0 116 94 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0 0 0 1828	329 0 329 0 58 0 88 0 0
EAST SOUTH WEST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED CLG EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUB TOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS AIR CHANGE HEAT LOSS	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 69 0 0 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 1007 0.57 574	0 1218 0 0 0 0 35 0 0				0 0 0 33 0 0 82 0 0 0	OSS 0 0 0 0 0 6866 0 0 0 2285 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1086 0 0 42 0 0 0	0 0 0 0 0 20 47 0 0 0	LOSS 0 0 0 0 392 164 0 0 0 5555	0 0 0 0 0 58 24 0 0	0 0 0 0 0 0 0 65 0	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 36 0		5 0 0 36 86 0 0	0 104 0 0 0 705 299 0 0 0 0 0 1108	0 165 0 0 0 104 44 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 116 94 0 0 0				0 0 10 208 0 0 110 208 0 0 20 392 0 0 168 590 0 0 0 0 1828 3225 0.50 1.49 4802	329 0 329 0 58 0 88 0 0
EAST SOUTH WEST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED CLG EXPOSED CLG EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT GSS AIR CHANGE HEAT GAIN DUCT LOSS	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 69 0 0 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 1007 0.57	0 1218 0 0 0 0 35 0 0 0				0 0 0 33 0 0 82 0 0 0	OSS 0 0 0 0 686 0 0 285 0 0 0 0 971	0 0 0 1086 0 0 42 0 0 0 0	0 0 0 0 0 20 47 0 0 0	LOSS 0 0 0 0 0 0 392 164 0 0 0 0 555 0.57	0 0 0 0 58 24 0 0 0	0 0 0 0 0 0 0 65 0	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0		5 0 0 36 86 0 0	0 104 0 0 0 705 299 0 0 0 0 0 1108	0 165 0 0 104 44 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 116 94 0 0 0 210				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0 0 0 1828 3225	329 0 329 0 58 0 88 0 0
EAST SOUTH WEST SYUTT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE OR EXPOSED CLG NO ATTIC EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT LOSS SUB TOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS AIR CHANGE HEAT GAIN DUCT LOSS DUCT GAIN	20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3 2.7 2.5	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 69 0 0 0 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 1007 0.57 574	0 1218 0 0 0 0 35 0 0 0				0 0 0 33 0 0 82 0 0 0	OSS 0 0 0 0 0 6866 0 0 0 2285 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1086 0 0 42 0 0 0 0 0	0 0 0 0 0 20 47 0 0 0	LOSS 0 0 0 0 392 164 0 0 0 5555	0 0 0 0 0 58 24 0 0 0 0	0 0 0 0 0 0 0 0 65 0 0	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 36 0 0		5 0 0 36 86 0 0 0	0 104 0 0 0 705 299 0 0 0 0 0 1108	0 165 0 0 0 104 44 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 116 94 0 0 0 0 0 6 210 7 17 0				0 0 10 208 0 0 110 208 0 0 20 392 0 0 168 590 0 0 0 0 1828 3225 0.50 1.49 4802	329 0 329 0 58 0 88 0 0 0
EAST SOUTH WEST SYUTT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS AIR CHANGE HEAT LOSS DUCT GAIN HEAT GAIN PEOPLE	20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3 2.7 2.5	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 69 0 0 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 1007 0.57 574	0 1218 0 0 0 0 35 0 0 0 0 0				0 0 0 33 0 0 82 0 0 0	OSS 0 0 0 0 0 6866 0 0 0 2285 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1086 0 0 42 0 0 0 0 0	0 0 0 0 0 20 47 0 0 0	LOSS 0 0 0 0 392 164 0 0 0 5555	0 0 0 0 0 58 24 0 0 0 0	0 0 0 0 0 0 0 65 0	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		5 0 0 36 86 0 0	0 104 0 0 0 705 299 0 0 0 0 0 1108	0 165 0 0 104 44 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 116 94 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0 0 10 208 0 0 10 208 0 0 20 392 0 0 168 590 0 0 0 1828 3225 0.50 1.49 4802 0	329 0 329 0 58 0 88 0 0 0
EAST SOUTH WEST SOUTH WEST SKYLT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUB TOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS AIR CHANGE HEAT CAIN DUCT LOSS DUCT GAIN HEAT GAIN PEOPLE HEAT GAIN APPLIANCES/LIGHTS	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3 2.7 2.5	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 69 0 0 0 0	LOSS 0 7699 0 0 0 0 0 2388 0 0 0 0 0 10007 0.577 5774 0	0 1218 0 0 0 0 35 0 0 0				0 0 0 33 0 0 82 0 0 0 0	OSS 0 0 0 0 6866 0 0 0 2285 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1086 0 0 42 0 0 0 0 0	0 0 0 0 0 20 47 0 0 0	LOSS 0 0 0 0 0 0 392 164 0 0 0 0 5555 0.57 316 0	0 0 0 0 0 58 24 0 0 0 0	0 0 0 0 0 0 0 0 65 0 0	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 36 0 0		5 0 0 36 86 0 0 0	0 104 0 0 0 705 299 0 0 0 0 1108 0.57 631	0 165 0 0 0 104 44 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 0 116 94 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0 0 10 208 0 0 110 208 0 0 20 392 0 0 168 590 0 0 0 1828 3225 0.50 1.49 4802 0	329 0 329 0 58 0 88 0 0 0
EAST SOUTH WEST SYUTT. DOORS NET EXPOSED WALL NET EXPOSED WALL NET EXPOSED BSMT WALL ABOVE GR EXPOSED CLG EXPOSED FLOOR BASEMENT/CRAWL HEAT LOSS SLAB ON GRADE HEAT LOSS SUBTOTAL HT GAIN LEVEL FACTOR / MULTIPLIER AIR CHANGE HEAT LOSS AIR CHANGE HEAT LOSS DUCT GAIN HEAT GAIN PEOPLE	20.8 20.8 20.8 20.8 34.1 19.6 3.5 3.5 1.3 2.7 2.5	12.8 32.9 19.8 32.9 132.1 2.9 0.5 0.6 1.2	37 0 0 0 0 69 0 0 0 0	LOSS 0 769 0 0 0 0 238 0 0 0 0 0 1007 0.57 574	0 1218 0 0 0 0 35 0 0 0 0 0				0 0 0 33 0 0 82 0 0 0 0	OSS 0 0 0 0 0 6866 0 0 0 2285 0 0 0 0 0 0 0 971 0.57	0 0 1086 0 0 42 0 0 0 0 0	0 0 0 0 0 20 47 0 0 0	LOSS 0 0 0 0 392 164 0 0 0 5555	0 0 0 0 0 58 24 0 0 0 0	0 0 0 0 0 0 0 0 65 0 0	LOSS 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		5 0 0 36 86 0 0 0	0 104 0 0 0 705 299 0 0 0 0 0 1108	0 165 0 0 104 44 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	S GAIN 0 0 0 0 0 116 94 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0 0 10 208 0 0 10 208 0 0 208 0 0 0 168 590 0 0 0 0 1828 3225 0.50 1.49 4802 0 0	329 0 329 0 58 0 88 0 0 0

TOTAL HEAT GAIN BTU/H:

17443 TONS: 1.45 LOSS DUE TO VENTILATION LOAD BTU/H: 1274

STRUCTURAL HEAT LOSS: 22903

TOTAL COMBINED HEAT LOSS BTU/H: 24177

Mhebal Kounke. INDIVIDUAL BCIN: 1969 MICHAEL O'ROURKE



			R RIDGE PIE HOM		S			TYPE:	OPT 2NE 2003				DATE:	Apr-24			GFA:	1961	LO#	104856				
HEATING CFM TOTAL HEAT LOSS AIR FLOW RATE CFM	545 22,903 23.8	А		LING CFM EAT GAIN RATE CFM	17,254		a	furna a/c coil p vailable p	pressure ace filter pressure pressure s/a & r/a	0.00 0.15	FACTOR	RY INSTA	LLED			59	SC6A026 FAN		CARRIEF 26 0	2	OUTPUT	AFUE = (BTU/H) = (BTU/H) =	26,000 25,000	
RUN COUNT S/A R/A All S/A diffusers 4"x10" unle All S/A runs 5"Ø unless not				1st 5 1 out.	3 1		max	enum pres s/a dif pre isted pres	ess. loss	0.02		r/a grille pre usted pre		0.02			N	DLOW MEDIUM M HIGH HIGH	545 770 0 0	т	DESIG	Ü	6 " E.S.P.	°F
RUN# ROOM NAME RM LOSS MBH. CFM PER RUN HEAT RM GAIN MBH. CFM PER RUN COOLING ADJUSTED PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LENGTH ADJUSTED PRESSURE ROUND DUCT SIZE HEATING VELOCITY (ft/min) COOLING VELOCITY (ft/min) OUTLET GRILL SIZE TRUNK	1 MBR 0.86 20 1.49 47 0.22 59 160 219 0.1 5 147 345 3X10 A	2 ENS 1.67 40 0.75 24 0.22 61 170 231 0.1 4 459 275 3X10 A		4 BED-2 1.49 35 2.444 77 0.22 27 190 217 0.1 6 178 393 4X10 B		6 BED-3 1.76 42 2.86 90 0.21 38 150 188 0.11 6 214 459 4X10 B	7 BATH 0.18 4 0.08 2 0.22 34 130 164 0.14 4 46 23 3X10 B			10 MBR 0.86 20 1.49 47 0.22 54 160 214 0.1 5 147 345 3X10 A		12 LV/DN 1.58 38 2.45 78 0.22 19 160 179 0.13 6 194 398 4X10 B			15 K/B/G 1.52 36 2.28 72 0.22 36 110 146 0.15 6 184 367 4X10 A	16 ENTRY-' 0.87 21 0.12 4 0.22 54 170 224 0.1 4 241 46 3X10 A	17 1 LAUN 0.11 3 0.74 24 0.22 37 140 177 0.13 4 34 275 3X10 B		19 FOY 1.74 41 0.44 0.22 10 170 180 0.12 4 470 161 3X10 B	20 ENTRY-2 2.22 53 0.29 9 0.22 56 160 216 0.1 5 389 66 3X10 A	21 BAS 2.68 64 0.61 19 0.22 35 150 185 0.12 5 470 140 3X10 A	22 BAS 2.68 64 0.61 19 0.22 31 90 121 0.19 5 470 140 3X10 B	23 BAS 2.68 64 0.61 19 0.22 16 120 136 0.16 5 470 140 3X10 B	
RUN # ROM NAME RM LOSS MBH. CFM PER RUN HEAT RM GAIN MBH. CFM PER RUN COOLING ADJUSTED PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LENGTH ADJUSTED PRESSURE ROUND DUCT SIZE HEATING VELOCITY (ft/min) COOLING VELOCITY (ft/min) OUTLET GRILL SIZE TRUNK																								
SUPPLY AIR TRUNK SIZE																	RETURN A	IR TRUNK	(SIZE					
TRUNK A TRUNK B TRUNK C TRUNK D TRUNK E TRUNK F	TRUNK CFM 254 545 0 0 0	STATIC PRESS. 0.10 0.10 0.00 0.00 0.00 0.00	7.9 10.6 0 0 0	RECT DUCT 8 14 0 0 0	x x x x x	8 8 8 8 8	VELOCITY (ft/min) 572 701 0 0 0 0 0		TRUNK G TRUNK H TRUNK I TRUNK J TRUNK K TRUNK L	TRUNK	STATIC PRESS. 0.00 0.00 0.00 0.00 0.00 0.00 0.00	ROUND DUCT 0 0 0 0 0 0	DUCT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	x x x x x	8 8 8 8 8	VELOCITY (ft/min) 0 0 0 0 0 0	TRUNK O TRUNK P TRUNK Q TRUNK R TRUNK S TRUNK T TRUNK U TRUNK V	TRUNK CFM 0 0 0 0 0 0 0 0 0	STATIC PRESS. 0.07 0.07 0.07 0.07 0.07 0.07 0.07 0	ROUND DUCT 0 0 0 0 0 0 0 0 0	DUCT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	x x x x x x	8 8 8 8 8	VELOCITY (ft/min) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
RETURN AIR # FLOOR AIR VOLUME PLENUM PRESSURE ACTUAL DUCT LGH. EQUIVALENT LENGTH TOTAL EFFECTIVE LH ADJUSTED PRESSURE ROUND DUCT SIZE INLET GRILL SIZE	1 2 60 0.20 55 235 290 0.07 5.1 8 X 14	2 70 0.20 46 195 241 0.08 5.2 8 X	3 2 80 0.20 47 155 202 0.10 5.1 8 X	4 2 80 0.20 55 140 195 0.10 5.1 8 X 14	5 1 195 0.20 24 220 244 0.08 7.6 8 X 24	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	0 0.20 1 0 1 19.60 0 0 X	BR 60 0.20 14 135 149 0.13 4.3 8 X 14	TRUNK W TRUNK X TRUNK Y TRUNK Z DROP	0 545 355 0 545	0.07 0.07 0.07 0.07 0.07 0.07	0 11.6 9.8 0 11.6	0 16 12 0 24	x x x x x	8 8 8 8 10	0 613 533 0 327



LO# TYPE: 2003 SUMMER RIDGE ESTATES SITE NAME:

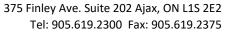
104856 OPT 2ND RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES	9.32.3.1(1)	SUPPLEMENTAL VEI	NTILATION CAPACITY			9.32.3.5.
a)		Total Ventilation Capa	city	148.4	_	cfm
b) Positive venting induced draft (except fireplaces)		Less Principal Ventil. 0	Capacity	63.6	_	cfm
c) Natural draft, B-vent or induced draft gas fireplace		Required Supplementa	al Capacity	84.8	_	cfm
d) Solid Fuel (including fireplaces)						
e) No Combustion Appliances		PRINCIPAL EXHAUS	VANEE V150H	Location:	R	SMT
HEATING SYSTEM			cfm	Location		IVI Approved
✓ Forced Air Non Forced Air			T HEAT LOSS CALCULATION	ı		
		CFM	ΔT °F	FACTOR	.,	% LOSS
Electric Space Heat		63.6 CFM	X 74 F X	1.08	Х	0.25
		SUPPLEMENTAL FAI Location	NS BY INST Model	FALLING CON cfm	TRACTO HVI	R Sones
HOUSE TYPE	9.32.1(2)	ENS	BY INSTALLING CONTRACTOR BY INSTALLING CONTRACTOR	50	✓ ✓	3.5
✓ I Type a) or b) appliance only, no solid fuel		BATH	BY INSTALLING CONTRACTOR	50		3.5
II Type I except with solid fuel (including fireplaces)					
		HEAT RECOVERY VE Model:				9.32.3.11.
		150	VANEE V150H cfm high	35		cfm low
IV Type I, or II with electric space heat		75	% Sensible Efficiency		✓ F	IVI Approved
Other: Type I, II or IV no forced air			@ 32 deg F (0 deg C)			
SYSTEM DESIGN OPTIONS	O.N.H.W.P.	LOCATION OF INSTA	ALLATION			
STSTEM DESIGN OPTIONS	O.N.H.W.P.	Lot:		Concession		
1 Exhaust only/Forced Air System		Township		Plan:		
2 HRV with Ducting/Forced Air System		Address		, idiii		
HRV Simplified/connected to forced air system		Roll #		Building Perr	nit #	
4 HRV with Ducting/non forced air system		BUILDER:	DOVAL DIE LIOMES	Building F Cit	int #	
Part 6 Design		Name:	ROYAL PIE HOMES			
TOTAL VENTILATION CAPACITY	9.32.3.3(1)	Address:				
Basement + Master Bedroom 2 @ 21.2 cfm 42.4	cfm	City:				
Other Bedrooms 2 @ 10.6 cfm 21.2	cfm	Telephone #:		Fax#:		
Kitchen & Bathrooms 4 @ 10.6 cfm 42.4	cfm	INSTALLING CONTR.	ACTOR	T GAT III		
Other Rooms 4 @ 10.6 cfm 42.4	cfm	Name:				
Table 9.32.3.A. TOTAL 148.4	cfm	Address:				
		City:				
PRINCIPAL VENTILATION CAPACITY REQUIRED	9.32.3.4.(1)			Fav.#.		
1 Bedroom 31.8	cfm	Telephone #:		Fax #:		
2 Bedroom 47.7	cfm		s ventilation system has been	designed		
3 Bedroom 63.6	cfm	in accordance with the Name:	ontario Building Code. HVAC Designs Ltd.			
4 Bedroom 79.5	cfm	Signature:	Meha	I Ofounde	٤.	
5 Bedroom 95.4	cfm	HRAI#	**	001820		
TOTAL 63.6 cfm		Date:		April-24		
I REVIEW AND TAKE RESPONIBILITY FOR THE DESIGN WORK AND AM QUAL	IFIED IN THE AP	PROPRIATE CATEGORY AS AN "O	THER DESIGNER" UNDER DIVISION C	, 3.2.5 OF THE BU	ILDING CO	DE.

INDIVIDUAL BCIN: 19669
Mahad Offinhe.



				80-12 Residential Hea						
			Form	iula Sheet (For Air Lea	ikage / Ventiliation C	alculation)				
LO#: 104	4856	Model: 2003		Builde	r: ROYAL PIE HOMES				Date:	2024-04-22
		Volume Calculatio	n				Air Change & Delt	a T Data		
				1						
use Volume	El	51 11 11 (6)	(6.3)				ATURAL AIR CHANG		0.275	
Level	Floor Area (ft²)	Floor Height (ft)	Volume (ft³)			SUMMER N	ATURAL AIR CHAN	JE KATE	0.086	
Bsmt First	980 980	9 10	8428 9408							
Second	981	9	8436.6	-			Design Te	mperature Diff	erence	
Third	0	9	0				Tin °C	Tout °C	ΔT °C	ΔT °F
Fourth	0	9	0	1		Winter DTDh	22	-19	41	74
	-	Total:	26,272.6 ft ³			Summer DTDc	24	30	6	11
		Total:	744.0 m ³				'			
	5.2.3	3.1 Heat Loss due to Ai	r Leakage			6.2.6	Sensible Gain due	to Air Leakage		
		V_{b}					V_{L}			
	$HL_{airb} =$	$LR_{airh} \times \frac{V_b}{3.6} \times I$	$DTD_h \times 1.2$		H	$IG_{salb} = LR_{airc}$	$\times \frac{r_b}{2.6} \times DTD_c$	× 1.2		
0.275		_ x <u>41°C</u>		= 2815 W	= 0.086		x 6°C		= [131 W
0.275	x <u>200.03</u>	_	A 1.2		- 0.000	XX	_ ^	A	L	131 VV
				= 9603 Btu/h					= [446 Btu/h
					1				L	
	5.2.3.2 He	at Loss due to Mechar	ical Ventilation			6.2.7 Se	ensible heat Gain d	ue to Ventilatio	n	
	$HL_{vairb} =$	$PVC \times DTD_h \times 1$	$1.08 \times (1-E)$		HL	$_{vairb} = PVC \times I$	$OTD_h \times 1.08 \times$	(1 - E)		
					.				-	
64 CFM	x <u>74</u> °F	x 1.08	x 0.25	= 1274 Btu/h	64 CFM	x <u>11 °F</u>	x <u>1.08</u>	x <u>0.25</u>	_ = [189 Btu/h
			5.2.3.3 Calcula	tion of Air Change Heat	Loss for Each Room (Flo	or Multiplier Section	1)			
		ш	- Land East	or v UI v ((L	и ти Ут	(ui ui	, b			
		nL_a	irr – Level Fuct	or \times HL_{airbv} \times {(H	$L_{agcr} + \Pi L_{bgcr} +$	$(\Pi L_{agclevel} + \Pi I$	bgclevel)}			
				HLairve Air Leakage +	Level Conductive Heat	Air Leakage Heat L	nss Multinlier (I F v			
		Level	Level Factor (LF)	Ventilation Heat Loss	Loss: (HL _{clevel})	HLairby /	• •			
				(Btu/h)	,		<u> </u>			
		1	0.5		3,225	1.4				
		2	0.3		5,056	0.5				
		3	0.2	9,603	4,867	0.3				
		4	0		0	0.0			Michael O'Ro	urke
		5	0		0	0.0	00		BCIN# 19669	
		*HLairbv = A	ir leakage heat loss -	+ ventilation heat loss					met 1	1 Ofounde
		*For a halan	ced or supply only ve	entilation system HLairve	. – 0				//// /sehan	1 Counte







HEAT LOSS AND GAIN SUMMARY SHEET

MODEL:	2003		OPT 2ND	BUILDER: ROYAL PIE HOMES	
SFQT:	1961	LO#	104856	SITE: SUMMER RIDGE ES	TATES
DESIGN A	SSUMPTIONS				
DESIGN A	1330IVIPTIONS				
HEATING			°F	COOLING	°F
OUTDOO	R DESIGN TEMP.		-2	OUTDOOR DESIGN TEMP.	86
INDOOR I	DESIGN TEMP.		72	INDOOR DESIGN TEMP. (MAX 75°F)	75
				WINDOW SHGC	0.60
BUILDING	DATA				
ATTACHN	1ENT:	,	ATTACHED	# OF STORIES (+BASEMENT):	3
FRONT FA	ACES:		EAST	ASSUMED (Y/N):	Υ
AIR CHAN	IGES PER HOUR:		3.00	ASSUMED (Y/N):	Υ
				· · ·	
AIR TIGHT	TNESS CATEGORY:		TIGHT	ASSUMED (Y/N):	Υ
WIND EXI	POSURF:	S	HELTERED	ASSUMED (Y/N):	Υ
	333.12.	J		(,,,	·
HOUSE V	OLUME (ft³):		26272.6	ASSUMED (Y/N):	Υ
INITEDNIAI	L SHADING:	BI INDS /	CURTAINS	ASSUMED OCCUPANTS:	4
INTERNA	L SHADING.	DLINDS/	CONTAINS	ASSOMED OCCUPANTS.	4
INTERIOR	LIGHTING LOAD (Btu/	/h/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Υ
FOUNDAT	FION CONFIGURATION		BCIN 1	DEPTH BELOW GRADE:	5.6 ft
. 001.5/1			301	22 8223 11 3.1.182.	3.010
LENGTH:	55.0 ft	WIDTH:	21.0 ft	EXPOSED PERIMETER:	56.0 ft

2012 OBC - COMPLIANCE PACKAGE		
	Compliance	Package
Component	PERFOR	MANCE
	Nominal	Min. Eff.
Ceiling with Attic Space Minimum RSI (R)-Value	60	59.22
Ceiling Without Attic Space Minimum RSI (R)-Value	31	27.65
Exposed Floor Minimum RSI (R)-Value	31	29.80
Walls Above Grade Minimum RSI (R)-Value	22+1.5	21.40
Basement Walls Minimum RSI (R)-Value	20	21.12
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value	-	-
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value	10	10
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10	11.13
Windows and Sliding Glass Doors Maximum U-Value	1.6	-
Skylights Maximum U-Value	2.6	-
Space Heating Equipment Minimum AFUE	96%	-
HRV/ERV Minimum Efficiency	75%	-
Domestic Hot Water Heater Minimum EF	0.9	-

INDIVIDUAL BCIN: 19669 MICHAEL O'ROURKE





Residential Foundation Thermal Load Calculator

Supplemental tool for CAN/CSA-F280

We	eather Sta	tion Description										
Province:	Ontario	·										
Region:	Brampto	n										
	Site D	escription										
Soil Conductivity:	Normal o	conductivity: dry sand, loam, clay										
Water Table:	Normal (7-10 m, 23-33 ft)										
Foundation Dimensions												
Floor Length (m):	16.8											
Floor Width (m):	6.4											
Exposed Perimeter (m):	17.1											
Wall Height (m):	2.6											
Depth Below Grade (m):	1.71	Insulation Configuration										
Window Area (m²):	1.9											
Door Area (m²):	1.9											
	Radi	ant Slab										
Heated Fraction of the Slab:	0											
Fluid Temperature (°C):	33											
	Desig	n Months										
Heating Month	1											
	Founda	ntion Loads										
Heating Load (Watts):		535										

TYPE: 2003 OPT 2ND

LO# 104856





Air Infiltration Residential Load Calculator

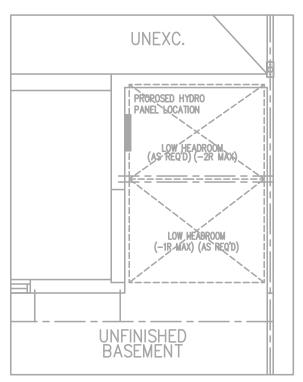
Supplemental tool for CAN/CSA-F280

Weather St	tation Description
Province:	Ontario
Region:	Brampton
Weather Station Location:	Open flat terrain, grass
Anemometer height (m):	10
Loca	al Shielding
Building Site:	Suburban, forest
Walls:	Heavy
Flue:	Heavy
Highest Ceiling Height (m):	6.46
Building	g Configuration
Туре:	Semi
Number of Stories:	Two
Foundation:	Full
House Volume (m³):	744.0
Air Leaka	age/Ventilation
Air Tightness Type:	Attached (3.0 ACH)
Custom BDT Data:	ELA @ 10 Pa. 833.4 cm ²
	3.00 ACH @ 50 Pa
Mechanical Ventilation (L/s):	Total Supply Total Exhaust
	30.0 30.0
F	lue Size
Flue #:	#1 #2 #3 #4
Diameter (mm):	0 0 0 0
Natural I	nfiltration Rates
Heating Air Leakage Rate (ACH,	/H): 0.27 5
Cooling Air Leakage Rate (ACH/	/H): 0.086

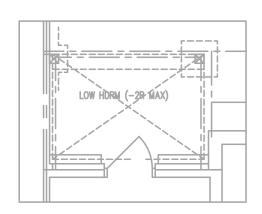
TYPE: 2003 OPT 2ND

LO# 104856

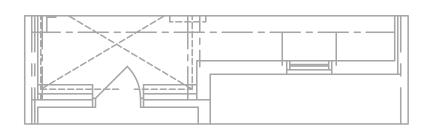




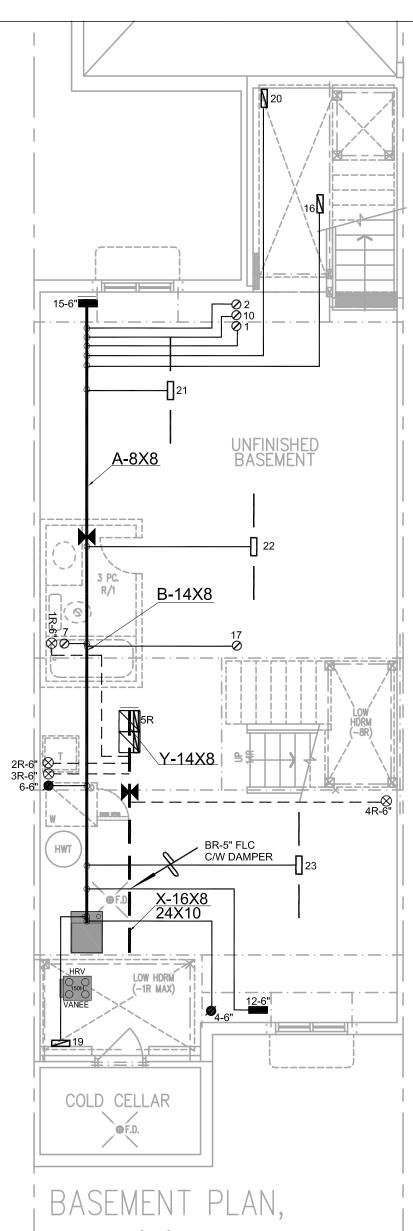
LAUNDRY ELEV. 'A' (ELEV. 'B' SIMILAR)



PART. BASEMENT PLAN FOR SUNKEN FOYER (-2R)ELEV. 'A' (ELEV. 'B' SIMILAR)



PART. BASEMENT PLAN, ELEV. 'B'



ELEV. 'A'

			3.							
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT	0	SUPPLY AIR STACK FROM 2nd FLOOR	<u></u>	30"x8" RETURN AIR GRILLE	\bowtie	RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE	REDUCER		REVISIONS						

I Michael O'Rourke have reviewed and take responsibility for the design work and am qualified under division C,3.2.5 of the building

Michael Ofourhe Michael O'Rourke BCIN # 19669 HVAC Designs Ltd.

PERFORMANCE

BASEMENT

HEATING

LAYOUT

APR/2024

3/16" = 1'-0"

BCIN# 19669

104856

ROYAL PINE HOMES

Project Name

SUMMER RIDGE ESTATES BRAMPTON, ONTARIO

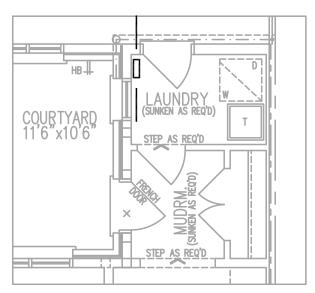
375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca

Specializing in Residential Mechanical Design Services Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.

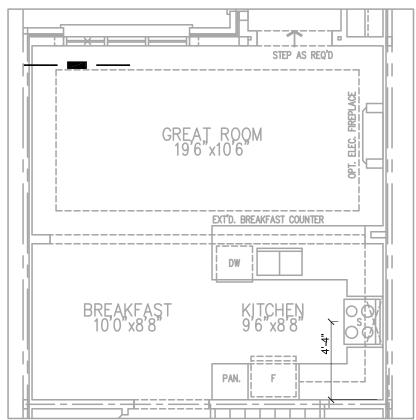
HEAT LOSS 24177 BTU/H					-				
MAKE CARRIER 2ND FLOOR 7 4 3		HEAT L		BTU/H	# OF RUNS	S/A	R/A	FANS	Shee
CARRIER 2ND FLOOR 7 4 3		11117	UNIT DATA		3RD FLOOR				
TONS FAN SPEED SSCA6A026M1410 1ST FLOOR 5			CARRIER		2ND FLOOR	7	4	3	
26 MBTU/H BASEMENT 3 1 0 Date OUTPUT 25 MBTU/H 25 UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT FAN SPEED cfm @ ON LAYOUT. UNDERCUT			C6A026M14	10	1ST FLOOR	5	1	2	
25 MBTU/H ALL S/A DIFFUSERS 4 "X10" UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT		INPUT	26	мвти/н	BASEMENT	3	1	0	Date
e COOLING TONS ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT		OUTPUT	25	MBTU/H					Scale
FAN SPEED cfm @ ON LAYOUT, UNDERCUT	е	COOLING	1,5	TONS	ON LAYOUT. A	LL S/A	RUN	S 5"Ø	
		FAN SPEEI	_		ON LAYOUT. U	NDER	CUT		L

2003 - OPT 2ND

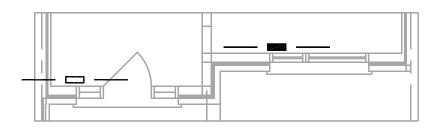
1961 sqft



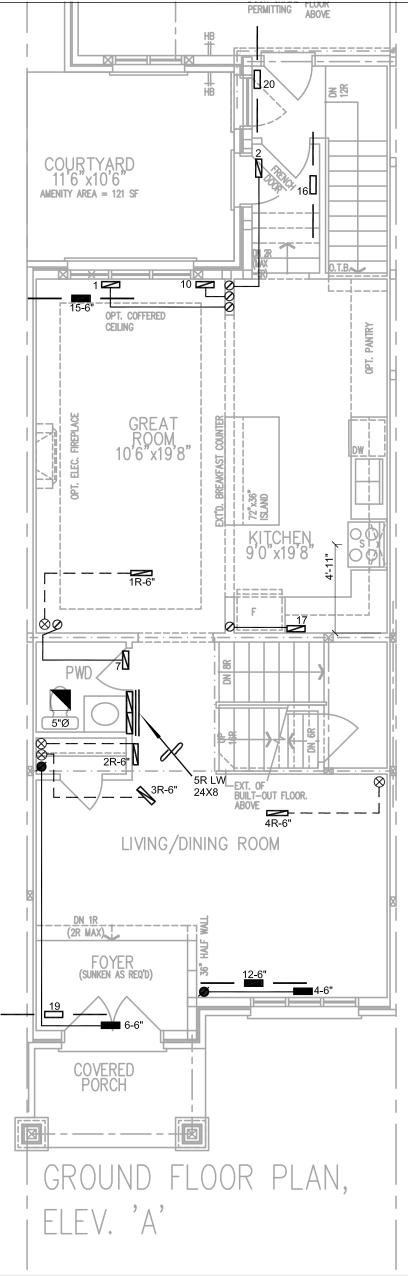
(UNDRY ELE) .ev. 'b' similar)



OPT. GROUND FLOOR PLAN, ELEV. 'A'



PART. GROUND FLOOR PLAN, ELEV. 'B'



		3.								
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT	0	SUPPLY AIR STACK FROM 2nd FLOOR	<u> </u>	30"x8" RETURN AIR GRILLE	\bowtie	RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE	REDUCER		REVISIONS						

I Michael O'Rourke have reviewed and take responsibility for the design work and am qualified under division C,3.2.5 of the building

Michael Ofowhe Michael O'Rourke BCIN # 19669 HVAC Designs Ltd.

PERFORMANCE

ROYAL PINE HOMES

Project Name

SUMMER RIDGE ESTATES BRAMPTON, ONTARIO

375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca

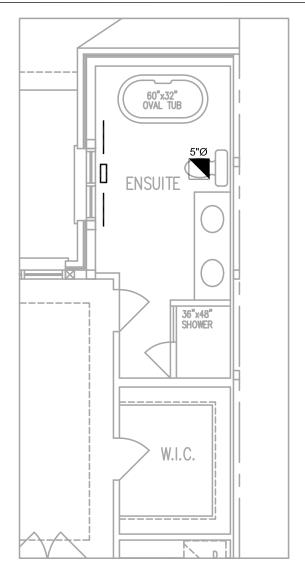
Specializing in Residential Mechanical Design Services

Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be 1961 sqft adequately insulated and be gas-proofed.

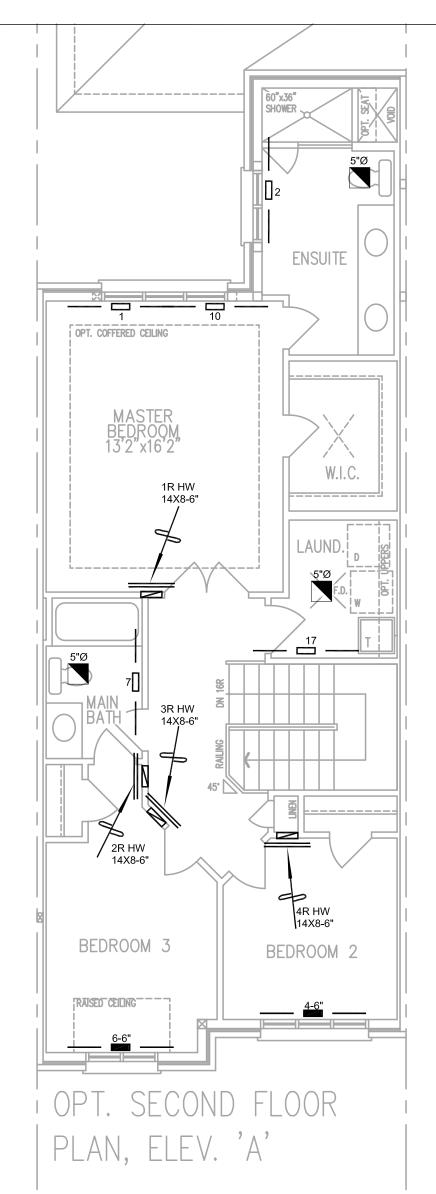
FIRST FLOOR **HEATING LAYOUT** APR/2024 3/16" = 1'-0"

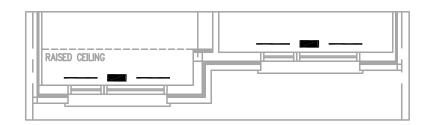
BCIN# 19669 104856 LO#

2003 - OPT 2ND



PART. SND. FLR. PLAN, ELEV. 'A' OPT. BATH LAYOUT





PART SECOND FLOOR PLAN, ELEV. 'B'

HVAC LEGEND								3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.		
	SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.		
	SUPPLY AIR GRILLE 6" BOOT	0	SUPPLY AIR STACK FROM 2nd FLOOR	<u> </u>	30"x8" RETURN AIR GRILLE	×	RETURN AIR STACK 2nd FLOOR	No.	Description	Date
	SUPPLY AIR BOOT ABOVE	Ø	6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE	Y	REDUCER		REVISIONS	

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I Michael O'Rourke have reviewed and take responsibility for the design work and am qualified under division C,3.2.5 of the building code.

Michael O'Rourke Michael O'Rourke BCIN # 19669 HVAC Designs Ltd. PERFORMANCE

Cllent

ROYAL PINE HOMES

2003 - OPT 2ND

Project Name

SUMMER RIDGE ESTATES BRAMPTON, ONTARIO

HVA DESIGNS LTD.

375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca

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Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.

SECOND FLOOR
HEATING
LAYOUT

Date APR/2024
Scale 3/16" = 1'-0"

BCIN# 19669 LO# 104856